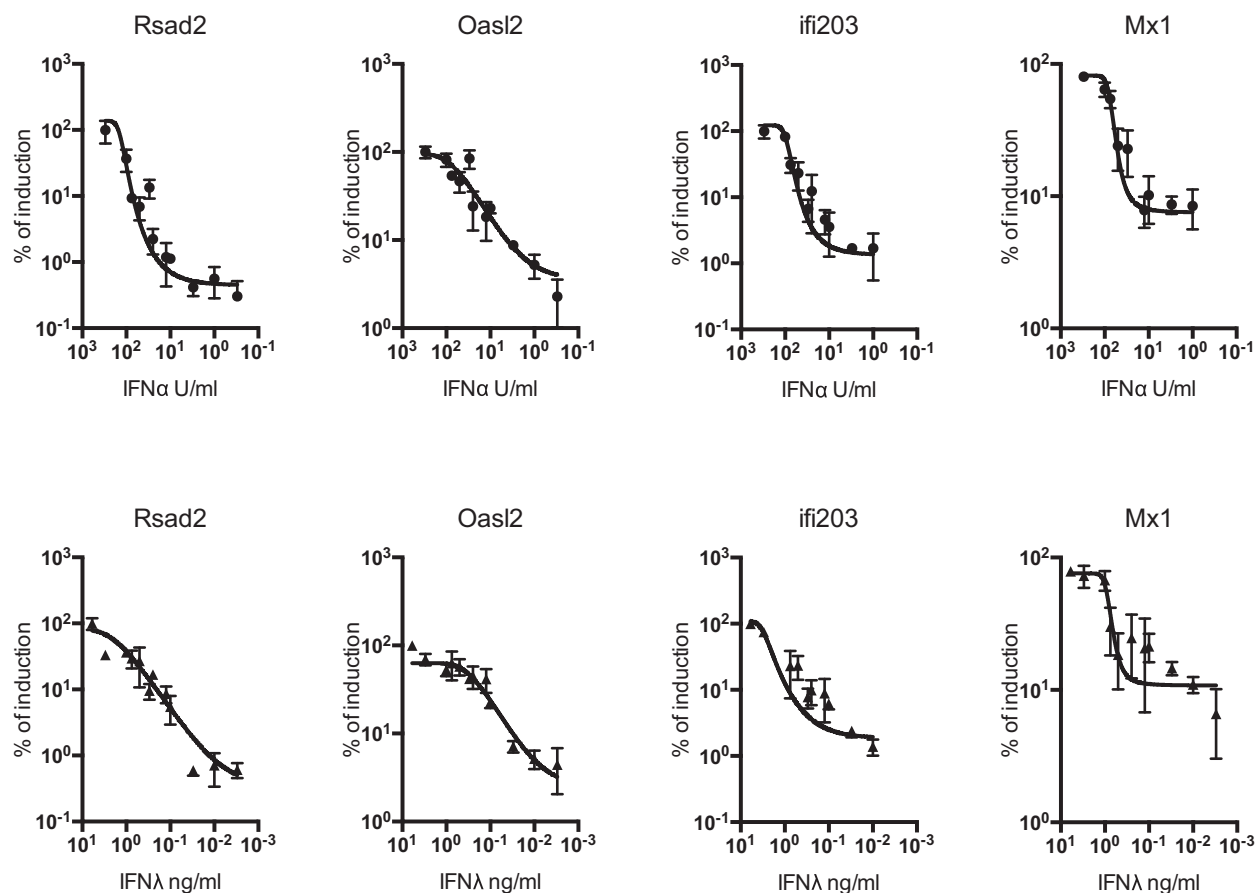


Expanded View Figures



$$\frac{\text{EC}_{50} \text{ IFN}\alpha \text{ ISG induction}}{\text{EC}_{50} \text{ IFN}\lambda \text{ ISG induction}} = \text{Conversion Ratio}$$

Figure EV1. Comparison of epithelial responsiveness to IFN α 4 and IFN λ 2.

AEC cultures were stimulated for 4 h with IFN α 4 (circles) or IFN λ 2 (triangles), and induction of indicated ISGs was assessed by qPCR. Prism 6 software was used to perform a curve fit (Sigmoidal, 4PL) and generate a dose-response curve and a half-maximal effective concentration (EC₅₀) for each gene assessed for each treatment. A conversion ratio was then generated using the indicated formula for each ISG and a final conversion ratio was taken from the average of all ISGs assessed. Values represent means $\pm$ SEM. Data are pooled from two independent experiments where $n = 3-7$ per experiment.

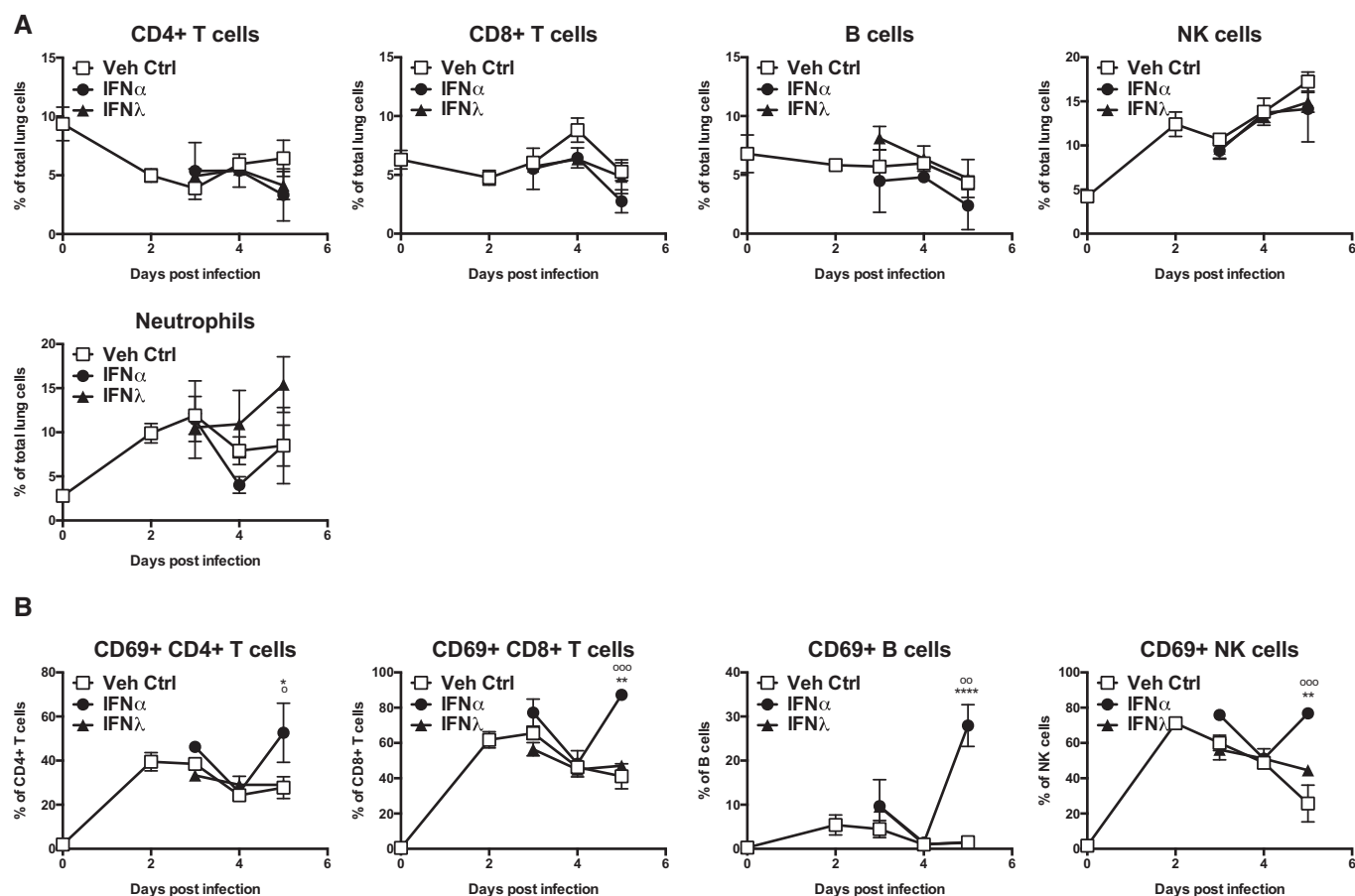


Figure EV2. Immune cell recruitment and lymphocyte activation upon IFN α and IFN λ treatment.

Mice were infected with PR8 and treated with IFN α (circles, 1.45 μ g/50 μ l), IFN λ (triangles, 2.6 μ g/50 μ l) or Veh Ctrl (squares, 50 μ l PBS). Flow cytometric quantification (A) of lymphocyte subsets and neutrophils and (B) of CD69 expression on lymphocytes in the lung was performed (data are representative of two independent experiments, $n = 3-5$). Significance assessed by two-way ANOVA where *indicates IFN α :Veh Ctrl and $^{\circ}$ indicates IFN α :IFN λ . IFN λ :Veh Ctrl was not significant. CD69 $^{+}$ CD4 $^{+}$ T cells: * $P = 0.0159$, $^{\circ}P = 0.0138$. CD69 $^{+}$ CD8 $^{+}$ T cells: ** $P = 0.002$, $^{\circ\circ\circ}P = 0.0003$. CD69 $^{+}$ B cells: **** $P < 0.0001$, $^{\circ\circ}P = 0.0069$. CD69 $^{+}$ NK cells: ** $P = 0.0012$, $^{\circ\circ\circ}P = 0.0005$ (B). Graphs show mean $\pm$ SEM.